DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023074 Address: 333 Burma Road **Date Inspected:** 22-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Li Yan Hua No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #19

This QA Inspector observed the following work in progress,

Flux Cored Arc Welding (FCAW)

Repair of Weld joint- X6041A as per CWR no. B-CWR-2835, Located on Cable bracket SA6529. Welder is identified as 062806. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) -Esab-Repair-FCM..

Repair of Weld joint- X6043A as per CWR no. B-CWR-2835, Located on Cable bracket SA6031. Welder is identified as 062806. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) -Esab-Repair-FCM.

Repair of Weld joint- X6041B as per CWR no. B-CWR-2835, Located on Cable bracket SA6029. Welder is identified as 062749. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) –Esab-Repair-FCM.

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Shielded Metal Arc Welding (SMAW)

Weld joint- 033, Located on Suspender Bracket SB27-001-110W. Welder is identified as 259566. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-TC-U4B-FCM-1.

Weld joint- 026, Located on Suspender Bracket SB28-001-110E. Welder is identified as 062814. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-P-2212-TC-U4B-FCM-1.

Heat Straightening:

Heat Straightening being performed on Cable Brackets identified as SA6029 and SA 6030 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Liu Tao present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) - 10216.

Bay #16

This QA Inspector observed the following work in progress

Flux Cored Arc Welding (FCAW)

Weld joint- 019, Located on Crash Barrier W5-SB32A-002. Welder is identified as 201074. ZPMC Quality Control Inspector (QC) is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS-B-T-2131-ESAB.

Weld joint- 081 Located on Crash Barrier W5-SB33A-002. Welder is identified as 206296. ZPMC Quality Control Inspector (QC) is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

Weld joint- 050 Located on Crash Barrier E2-SB37-001. Welder is identified as 206296. ZPMC Quality Control Inspector (QC) is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS-B-T-2131-ESAB.

West Gate of Bay #14

Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 08600

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This QA inspector performed (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an TL 6028 MT report for this date. The member is identified as OBG Cross beam CB18 components. The weld designations reviewed are as follows:

CB3002J-002- Joint no's -006, 007, 008, 079 to 088

CB3002J-002- Joint no's - 065 to 072

CB3002J-002- Joint no's -097 to 101

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

No relevent Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

| Inspected By: | Baskar, Govindarajan | Quality Assurance Inspector |
|---------------|----------------------|-----------------------------|
| Reviewed By: | Clifford, William | QA Reviewer |